

**NASA Occupational Health  
Evaluation Tool Requirements: Industrial Hygiene**

| <b>Section I: Management Leadership and Employee Involvement</b> |   |   |
|--|---|---|
| 1.   | Does the Center have a written Environmental Health policy?   | 1) <b>29 CFR 1960.12(b)</b><br>2) <b>NPD 1820.1B 1 (i)</b><br>3) <b>ANSI Z10 3.1.2</b>          |
| 2.   | Does Center management endorse this policy?   | 1) <b>29 CFR 1960.8(a)</b><br>2) <b>NPD 1820.1B 5 (f)</b><br>3) <b>ANSI Z10 3.1.2 and 3.1.3</b> |
| 3.   | Is the policy reviewed and updated periodically?  | 1) <b>29 CFR 1960.8(c)</b><br>2) <b>NPD 1820.1B 1 (i)</b><br>3) <b>ANSI Z10 3.1.2</b>           |
| 4.   | Does the policy assign responsibility, accountability and authority to all effected organizations, departments and employees?                     | 1) <b>29 CFR 1960.9 &amp; 1960.11</b><br>2) <b>ANSI Z10 3.1.3</b>                               |
| 5.   | Do the organizations, departments served know what to expect and what's expected of them from the policy?   | 1) <b>29 CFR 1960.10, 1960.11, 1960.54, 1960.55 &amp; 1960.59</b><br>2) <b>ANSI Z10 3.2</b>     |
| 6.   | Is management involved in EH site inspections, incident/exposure reviews?   | 1) <b>1960.26(b)(1)</b><br>2) <b>ANSI Z10 3.1.3</b>   |
| 7.   | Is Environmental Health part of each supervisors employee evaluation?   | 1) <b>29 CFR 1960.11</b>  |
| 8.   | Is top management routinely apprised of the status of Environmental Health issues?  | 1) <b>29 CFR 1960.11</b><br>2) <b>ANSI Z10 3.1.3</b>  |
| 9.   | Are employees involved in the health & safety program?  | 1) <b>29 CFR 1960.10(b)</b><br>2) <b>ANSI Z10 3.2</b>   |
| 10.  | Do employees and/or their representatives have access to all pertinent Environmental Health information, including inspection reports and audits? | 1) <b>29 CFR 1960.12(c)(1)</b><br>2) <b>ANSI Z10 3.2B</b>                                       |
| 11.  | Are employees authorized to stop activities that present potentially serious health hazards?  | 1) <b>29 CFR 1960.10(c) &amp; 1960.28(a)(c)</b><br>2) <b>NPD 1820.1B 1 (a)</b>                  |

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| 12.  | Do employees and/or their representatives participate in audits, facility & system design reviews, program reviews conducted by management or third parties, and in the collection of samples for monitoring purposes? | 1) 29 CFR 1960.10(d) & 1960.26(b)(6) & 1960.27(a)<br>2) ANSI Z10 3.2A   |
| 13.  | Have the employees and/or their representative received the necessary training and education to participate in such activities?  | 1) 29 CFR 1960.59(b)<br>2) ANSI Z10 3.2A  |
| 14.  | Can employees at any level in the organization explain the priority of safety and health in relation to program goals?   | 1) 29 CFR 1960.6(b)(4) & 1960.12(e) 1960.10(a)  |
| 15.  | Are Environmental Health costs planned and budgeted?   | 1) 29 CFR 1960. (b)(2)<br>2) NPD 1820.1B 5 (e)<br>3) ANSI Z10 3.1.3B  |
| 16.  | Are resources procured in a timely and responsive manner?  | 1) 29 CFR 1960.7(c)(2)<br>2) NPD 1820.1B 1 (g)<br>3) NPR 1800.1 4.2.2 b<br>4) NPR 1800.1 4.3.2 a<br>5) ANSI Z10 3.1.3B<br>6) NASA Environmental Health Program Model Statement of Work – B. Program Goals |
| 17.  | Is there adequate space and equipment for use by Environmental Health Personnel?   | 1) 29 CFR 1960.6(b)(2) & 1960.7(c)(3)<br>2) NPR 1800.1 4.2.2 b<br>3) NPR 1800.1 4.3.2 a<br>4) ANSI Z10 3.1.3B<br>5) NASA Environmental Health Program Model Statement of Work – B. Program Goals          |
| 18.  | Are adequate Environmental Health information sources available?   | 1) 29 CFR 1960.7(c)(6)<br>2) NPD 1820.1B 5 (e)<br>3) NPR 1800.1 4.2.2 b<br>4) NPR 1800.1 4.3.2 a  |
| 19.  | Has EH Cost and Staffing kept up with inflation and Center organizational growth?  | 1) 29 CFR 1960.7(a) & 1960.7(c)(1)<br>2) NPD 1820.1B 5 (e)  |

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| 20.  | Does the Center anticipate any EH budget reductions (NASA and/or contractor)?   | 1) ANSI Z10 3.1.3B & ANSI Z10 4.1.1C  |
| 21.  | Does the Center anticipate any EH staffing reductions (NASA and/or contractor)?   | 1) ANSI Z10 3.1.3B & ANSI Z10 4.1.1C  |
| 22.  | Are EH personnel afforded the time and resources to acquire routine and adequate professional development training?   | 1) 29 CFR 1960.7(c)(1)<br>2) NPR 1800.1 4.2.2 b<br>3) NPR 1800.1 4.3.2 a<br>4) NPR 1800.1 2.1.3.3<br>5) ANSI Z10 4.1.1C   |
| 23.  | Are the NASA and contractor personnel responsible for oversight of Environmental Health program areas professionally certified in the disciplines that they oversee (CIH, CHP, etc.)? | 1) 29 CFR 1960.2(s) & 1960.56 & 1960.57<br>2) NPR 1800.1 4.2.2 b<br>3) NPR 1800.1 4.3.2 a<br>4) NPR 1800.1 2.1.3<br>5) ANSI Z10 4.1.1C<br>6) NASA Environmental Health Program Model Statement of Work – D Staffing |
| 24.  | Are both on-site and temporary contractors covered by the same Environmental Health policy and requirements?  | 1) NASA FAR Subpart 1823.7001(a)(1)<br>2) NPD 1820.1B 1 (d)   |
| 25.  | Are Environmental Health requirements included in their contracts?  | 1) NASA FAR Subpart 1823.7001(a) (1-4)<br>2) NPD 8715.1(1)(c)<br>3) NPD 1820.1B 1 (d) 3)<br>4) ANSI Z10 5.1.4   |
| 26.  | Are Environmental Health personnel involved in developing and reviewing contractor and sub-contractor requirements before the contracts are awarded?                                  | 1) NASA FAR Subpart 1823.7001(c)<br>2) ANSI Z10 5.1.4<br>3) NASA Environmental Health Program Model Statement of Work – C. Function   |
| 27.  | Does the Center Environmental Health staff meet with contractors prior to their beginning work?   | 1) 29 CFR 1960.6(b)(6)<br>2) ANSI Z10 5.1.4   |

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| 28.  | Is there a designated Environmental Health representative to monitor on-site contractors?  | 1) <i>OSHA CSP 03-01-002 - TED 8.4 Questions E8, E6</i>   |
| 29.  | If so, does this representative have the authority to stop contractor operations if the host or contractor employees are exposed to a serious hazard?                                      | 1) <i>OSHA CSP 03-01-002 - TED 8.4 Questions E5</i><br>2) <i>NASA Environmental Health Program Model Statement of Work – C. Function</i>  |
| 30.  | Is there a written requirement to ensure that the Center’s Environmental Health Personnel included in project “Final Walk-Downs” before formal acceptance of the sub contractor’s work?    | 1) <i>OSHA CSP 03-01-002 - TED 8.4 Questions E8</i>   |
| <b>Section II: Workplace Analysis</b>                            |  |   |
| 31.  | Has there been a comprehensive Environmental Health Program exposure assessment performed that relates personnel, tasks, locations and inventories so as to rank their exposure potential? | 1) <i>29 CFR 1960.25(c) &amp; 1960.66(c)</i><br>2) <i>NPR 1800.1 4.2</i><br>3) <i>ANSI Z10 6.1.B</i><br>4) <i>NASA Environmental Health Program Model Statement of Work – C. Function</i> |
| 32.  | If so, is it updated whenever process changes are made?  | 1) <i>NPR 1800.1 4.2.3 h</i><br>2) <i>ANSI Z10 6.1.B</i>  |
| 33.  | Are exposure monitoring decisions based upon information gathered in the exposure assessment?  | 1) <i>29 CFR 1960.66(c)</i><br>2) <i>NPR 1800.1 4.2.3 e</i>   |
| 34.  | Is there a formal decision making process for the selection of occupational exposure limits?   | 1) <i>29 CFR 1960.16, 17 &amp; 18</i><br>2) <i>NPR 1800.1 4.3</i>   |
| 35.  | Are measurements made to determine the effectiveness of engineering controls?  | 1) <i>29 CFR 1960.16, 17 &amp; 18</i><br>2) <i>NPD 1820.1B 1 (h)</i><br>3) <i>ANSI Z10 5.1.1C</i><br>4) <i>NASA Environmental Health Program Model Statement of Work – C. Function</i>    |

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| <b>Section II: Workplace Analysis</b> |  |  |
|---------------------------------------|--|--|
| 36.                                   | Is there a procedure for calibration of sampling equipment?  | 1) <b>29 CFR 1960.25(a)</b><br>2) <b>NPR 1800.1 4.4</b><br>3) <b>ANSI Z10 6.1</b><br>4) <b>NASA Environmental Health Program Model Statement of Work – C. Function</b> |
| 37.                                   | Are samples sent to a laboratory accredited by the appropriate, recognized accrediting body (ex. AIHA)?                      | 1) <b>ANSI Z10 6.1</b><br>2) <b>NASA Environmental Health Program Model Statement of Work – C. Functions</b>   |
| 38.                                   | Are the monitoring results communicated to all involved parties?   | 1) <b>29 CFR 1960.26(b)</b><br>2) <b>ANSI Z10 3.2B</b>   |
| 39.                                   | Is the monitoring data used in the strategic management of the Environmental Health program?                                 | 1) <b>NPR 1800.1 4.2.3 d &amp; e</b><br>2) <b>ANSI Z10 4.2</b>   |
| 40.                                   | Is routine hazard analysis performed?  | 1) <b>ANSI Z10 5.1.2</b><br>2) <b>NASA Environmental Health Program Model Statement of Work – C. Function</b>  |
| 41.                                   | Are employees involved in the EH hazard analysis process?  | 1) <b>ANSI Z10 3.2</b>   |
| 42.                                   | Are Environmental Health hazard assessments reevaluated when new information is received?                                    | 1) <b>NPR 1800.1 4.2.3 h</b><br>2) <b>ANSI Z10 5.1.2</b>   |
| 43.                                   | Does management understand the potential Environmental Health hazards of the site?   | 1) <b>29 CFR 1960.54</b><br>2) <b>ANSI Z10 3.1.3</b>   |
| 44.                                   | Is there an inventory of all hazardous substances (chemical, radiological, etc) at the Center?                               | 1) <b>29 CFR 1910.1200</b><br>2) <b>NPD 1820.1B 1 (c)</b><br>3) <b>NASA Environmental Health Program Model Statement of Work – B. Program Goals</b>                    |
| 45.                                   | Is there a system in place to ensure that new materials (purchases) are reviewed and added to the hazard/exposure inventory? | 1) <b>29 CFR 1910.1200</b><br>2) <b>NPD 1820.1B 1 (c)</b><br>3) <b>ANSI Z10 5.1.3</b>  |
| 46.                                   | Are Material Safety Data Sheets (MSDS) obtained and maintained on all supplied materials, intermediates and wastes?          | 1) <b>29 CFR 1910.1200</b><br>2) <b>29 CFR 1960.34(d)</b>  |

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|--|--|--|
| 47.  | Are routine workplace Environmental Health inspections (including environmental sanitation and food services where applicable) conducted?  | 1) <b>29 CFR 1960.25(c)</b><br>2) <b>NPD 1820.1B 1 (f)</b><br>3) <b>ANSI Z10 6.1A</b><br>4) <b>NASA Environmental Health Program Model Statement of Work – C. Function</b> |
| 48.  | If so, with what frequency?  | 1) <b>29 CFR 1960.25(c)</b><br>2) <b>NPD 1820.1B 1(f)</b>  |
| 49.  | Are those conducting the inspections trained in health hazard recognition?   | 1) <b>29 CFR 1960.25(a)</b><br>2) <b>NPD 1820. 1B 1(f)</b>   |
| 50.  | Are there written procedures or guidance for performing inspections?   | 1) <b>29 CFR 1960.26 (a), (b), (c)</b><br>2) <b>NPD 1820.1B 1 (i)</b><br>3) <b>ANSI Z10 5.4</b>  |
| 51.  | Do the resulting written reports clearly indicate what needs to be corrected and who is responsible for the correction?  | 1) <b>29 CFR 1960.26(c) &amp; 1960.30(a)-(d)</b><br>2) <b>NPD 1820.1B 1 (h)</b><br>3) <b>ANSI Z10 6.1</b>  |
| 52.  | Is each open health hazard tracked until it has been corrected?  | 1) <b>29 CFR 1960.30(b)</b><br>2) <b>ANSI Z10 6.1</b>  |
| 53   | Are exposure incidents investigated by a Industrial Hygienist or other competent person to determine the root cause and means of prevention?                                     | 1) <b>29 CFR 1960.2(q)</b><br>2) <b>ANSI Z10 6.2</b><br>3) <b>NASA Environmental Health Program Model Statement of Work – C. Function</b>                                  |
| 54   | Is there a reliable system for reporting health hazards?   | 1) <b>29 CFR 1960.28</b><br>2) <b>ANSI Z10 5.3B</b>  |
| <b>Section III: Health Hazard Prevention and Control</b> |  |  |
| 55.  | Are Environmental Health personnel involved procurement process?   | 1) <b>NPD 1820.1B 1 (d)</b><br>2) <b>ANSI Z10 5.1.3</b>  |
| 56.  | Is there a written policy that addresses Environmental Health involvement in procurements?   | 1) <b>NASA FAR Subchapter 1823.7001(c)</b><br>2) <b>ANSI Z10 5.1.3</b>   |
| 57.  | Have there been any significant issues resulting from contracts awarded without EH criteria or significant incidents where contractors created an unsafe or unhealthy condition? | 1) <b>ANSI Z10 5.1.4</b>   |

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| <b>Section III: Health Hazard Prevention and Control</b> |  |  |
|--|--|--|
| 58.  | Do Environmental Health personnel participate in design reviews?   | 1) NPD 1820.1(d) & (e)<br>2) ANSI Z10 5.1.2<br>3) NASA Environmental Health Program Model Statement of Work – C. Function  |
| 59.  | Are all new processes, materials and/or equipment analyzed before use begins to determine potential hazards?   | 1) NPD 1820.1(d) & (e)<br>2) ANSI Z10 5.1.2  |
| 60.  | Is there an established and understood procedure by which Center Environmental Health is notified when changes are planned that may alter the potential chemical and physical hazards present?           | 1) NPD 1820.1(1)(d) & (e)<br>2) ANSI Z10 5.1.2   |
| 61.  | Is there an established system for ensuring that new toxicological and regulatory information is received and analyzed?  | 1) 29 CFR 1960.16<br>2) NPD 1820.1B (1)(b)<br>3) NPR 1800.1 4.1.2 (b)  |
| 62.  | Are any specific hazard control programs required (ex. respiratory protection, hearing conservation, substance specific standards in 29 CFR 1910 subpart Z, pest control, food service sanitation, etc)? | 1) 29 CFR 1960.16 1910.134, 1910.95, 1910.1450 (See attachment)<br>2) NPD 1820.1B 1 (b)<br>3) NPR 1800.1 4.1 & 4.1.2 b<br>4) ANSI Z10 3.1.2D<br>5) NASA Environmental Health Program Model Statement of Work – C. Function |
| 63.  | Are there written, standard procedures for each required program?  | 1) 29 CFR 1960.16 1910.134, 1910.95, 1910.1450 (See attachment)<br>2) NPD 1820.1B 1 (b)<br>3) ANSI Z10 3.1.2D  |
| 64.  | Is the initiation of Environmental Health hazard control programs based on anticipation of hazards and early intervention?   | 1) NPD 1820.1B 1<br>2) NPR 1800.1 4.2.1<br>3) NPR 1800.1 3.1.1.2 b<br>4) ANSI Z10 5.1.1 & 5.1.2  |
| 66.  | Is there a process to evaluate the continuing effectiveness of exposure controls?  | 1) NPD 1820.1B (i)<br>2) ANSI Z10 4.1.2  |

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| <b>Section III: Health Hazard Prevention and Control</b>   |  |   |
|--|--|---|
| 67.  | Is there a process in place to communicate specific health hazard control recommendations to the proper people?                                  | 1) 29 CFR 1910.1200(h)(3)(iii) & (iv)<br>2) ANSI Z10 6.1  |
| 68.  | Is there a system for tracking what happens to the recommendations?  | 1) ANSI Z10 6.4 &<br>2) ANSI Z10 6.3B   |
| 69.  | Are Environmental Health personal involved in deciding on any course of action resulting from these recommendations?                             | 1) NPD 1820.1B 1 (h)  |
| 70.  | Are all medical surveillance, monitoring, removal and reporting programs required by applicable compliance standards implemented and documented? | 1) NPD 1820.1B 1b<br>2) NPD 1810.2B 1b<br>3) NPR 1800.1 3.2.3.1<br>4) NPR 1800.1 3.2.1.2  |
| 71.  | Do Environmental Health personnel receive information on medical findings that could relate to occupational exposures?                           | 1) NPR 1800.1 3.2.3.2<br>2) NASA Environmental Health Program Model Statement of Work – C. Function   |
| 72.  | Are the facilities health care providers involved in the identification and control health hazards?  | 1) NPR 1800.1 3.1.1.3   |
| <b>Section IV: Emergency Environmental Health Response</b> |  |   |
| 73.  | Is there a written Emergency Response Plan?  | 1) NPG 8715.2, Chapter 2.1.2.2<br>2) ANSI Z10 5.1.5A  |
| 74.  | Did Environmental Health personal participate in the development of the plan?  | 1) NPG 8715.2, Chapter 6.2.3(a)<br>2) NPD 1820.1B 1e<br>3) NPR 1800.1 2.3.6.3<br>4) NASA Environmental Health Program Model Statement of Work – C. Function |
| 75.  | Are Environmental health roles and responsibilities clearly defined?   | 1) NPG 8715.2, Chapter 7(h)<br>2) NPD 1820.1B 1e<br>3) NPR 1800.1 2.3.6.3   |
| <b>Section V: Environmental Health Training</b>            |  |   |
| 76.  | Are training needs assessments performed?  | 1) 29 CFR 1960.6(c)<br>2) ANSI Z10 5.1.5A 3) ANSI Z490.1 4.2  |
| 77.  | Is there a training plan that describes who should be trained in what and when?  | 1) 29 CFR 1960.59(a)<br>2) ANSI Z490.1 3.2  |

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| <b>Section V: Environmental Health Training</b> |   |   |
|---|---|---|
| 78.   | Are there records of who has been trained?  | 1) 29 CFR 1960.16, 1910.134, 1910.95, 1910.1450 (see attachment)<br>2) ANSI Z10 5.4<br>3) ANSI Z490.1 7.1 |
| 79.   | Is the training provided and attended on schedule?  | 1) ANSI Z10 5.4<br>2) ANSI Z490.1 3.3.1   |
| 80.   | Are the methods of delivery adequate for the subject matter?  | 1) ANSI Z10 5.4<br>2) ANSI Z490.1 4.4.1   |
| 81.   | Is training taught by qualified instructors?  | 1) ANSI Z10 5.4<br>2) ANSI Z490.1 5.1   |
| 82.   | Is the effectiveness of the training evaluated?   | 1) ANSI Z490.1 6  |
| 83.   | Does the training cover the environmental health hazards properties of hazardous materials and precautions to be followed for the health hazards to which each employee is exposed? | 1) 29 CFR 1910.1200(h)(3)(i) & (ii) & (iii)<br>2) ANSI Z490.1 4.4.2                                       |
| 84.   | Have personnel been trained on how and where to obtain information related to these health hazards?   | 1) 29 CFR 1910.1200(h)(2)(iii) & (h)(3)(iv)   |

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